

**RECESSION OF THE LAKE CHAD AS A CONTRIBUTING FACTOR TO BOKO
HARAM INSURGENCY IN NORTH EASTERN NIGERIA**

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Abstract

Insecurity is one of the major challenges facing the world presently particularly in developing countries where insurgents, militias, militants and other criminal elements carry out violent attacks on the populace. The Boko haram insurgency started violent attacks on the communities in the north eastern Nigeria in the year 2009 and continuing up to the present times. This paper argues that the recession of the Lake Chad is a contributing factor to Boko haram insurgency. Data for the study were generated through secondary sources by examining map of the North east, satellite imageries that depicts the recession of the lake and other sources. The study found out that the lake provide water for irrigation, fishing activities, water for cattle, means of water transportation across the four counties that shares the lake etc. This shows that the lake is a source of livelihood to many people. The gradual recession of the lake over the years has led to the loss of sources of livelihoods to many people who became unemployed and then falls into poverty. These large numbers of the unemployed, poor people are offered money and lured to join the insurgency to work for them. The Boko Haram has thus exploited the helpless situation of the unemployed and poor people to make them to adopt their extremist ideology. Since independence in 1960, no ethno-religious crisis has lasted for a long period of time as the Boko haram insurgency. One of the fundamental reasons is because the insurgents were able to recruit fighters and suicide bombers from the large pool of the unemployed people particularly the youths. Unemployment and poverty are two of the most important factors for the insurgency both of which could be linked to the recession of the lake. There has been a growing concern for the recession of the lake among members of the Lake Chad Basin Commission which has led to the convening of an international conference at Abuja in February 2018. It is therefore recommend that comprehensive programmes of action should be adopted to save the lake from extinction and restore sources of livelihoods thereby reducing insecurity and possibility of the rise of another insurgency in the future.

Key word: Recession, Lake Chad, Boko Haram, insurgency, North East

Introduction

A lake is a considerable body of inland water or an expended part of a river (Lodha, 2007). In general lakes can also be referred to as inland bodies of water found in natural depression surrounded by higher ground. They are bodies of water located completely inland and separated from divisions of oceans and seas (World Atlas, 2018). They are much larger and deeper when compared to bodies of water that are referred to as ponds and many of them are fed and drained by streams and rivers.

Lakes can be formed as a result of tectonic, volcanic or glacial activities but also intentional and accidental human activities have created many lakes (World Atlas, 2018). They vary in size from small to larger lakes that covers and extends over a large area. It is estimated that there are 2 million lakes of varying sizes across the globe with most of the world's great lakes found in North America (World Atlas, 2018). Also while some lakes lie in mountainous areas, others are found at elevations near sea level. Lakes, base on their water content can contain either fresh water or salt and saline water. Examples of the Great Lakes of North America are the Great Bear Lake, Lake Michigan, Lake Superior Lake Huron and Lake Erie. In Europe, the largest Lakes are the Caspian sea and lake Baikal while in Asia, the largest lakes are Lake Urmia and Lake Issyk-Kui. In South America the largest lakes are Lake Titicaca and Lake Nicaragua. In the continent of Africa, the largest lakes are Lake Victoria, Lake Tangayinka and Lake Malawi.

The Lake Chad is one of the largest lakes in Africa based on aerial coverage. Like the other large lakes listed above its aerial extent covers multiple countries as the parts of the lake is found in Chad, (from where the lake derive its name), Nigeria, Cameroun and Niger Republic. The Lake Chad is a freshwater lake that is located in the Sahelian zone of west-central Africa. The lake is historically ranked as one of the largest lakes in Africa base on aerial coverage but the lake has varied in size over the centuries. The Lake Chad is an inland drainage basin which has no link to the sea or ocean. The rivers that flow into it include River Yobe, that rises from the Jos Plateau, river Yedseram and Ngadda that rises from the Mandara mountains and the river Chari from Cameroun (FAO, 2018). These rivers are seasonal in nature and as such the lake is subjected to seasonal fluctuations in the water levels between the rainy and dry seasons. In Nigeria the lake is the largest natural lake and is located in the north eastern part precisely in northern part of Borno state. The lake is generally shallow or not deep but it covers an extensive area that stretches to

three other countries beside Nigeria covering about 10,000 – 13,000 square kilometers (Dingba and Adamu, 2007).

The Lake Chad has over the years been reseeding, the recession of the lake started in the 1960s. In 1963 statistics showed that the lake covers an area of 25,000 square kilometers which reduce drastically to 1,500 sq.km in the year 2018 (Press reader, 2018). The recession of the lake means loss of sources of livelihoods to many farmers, cattle rearers, fishermen and host of others. This creates large number of people who became unemployed and with time have fallen into poverty. These social factors of unemployment and poverty have seen the 1990s – 2000s created minor insecurities in form of tension and communal clashes among the remaining communities as the struggle to control what is left of the water body (Press reader, 2018).

In the year 2009, the Boko Haram insurgency started violent attacks on communities in North Eastern Nigeria. From then till date the insurgents recruited combatants to fight for them while some serve as suicide bombers from the large number of the unemployed and poor people.

A report in 2015 titled “Environmental Audit of the Drying up the Lake Chad” noted that there is a correlation between the shrinking of the lake and the current insecurity in the northeast of Nigeria (Press reader, 2018). Also the Food and Agricultural Organization (FAO) has linked the rise of the insurgency to poverty as a result of failing fortunes of the lake. The United Nations Deputy Secretary General and former Minister of Environment of Nigeria at the occasion of world water week, attributed the Boko Haram insurgency largely to the drying up of the once thriving lake which provided millions with sources of livelihood (Vanguard, 2018).

The aim of the paper is to assess the recession of Lake Chad as a contributing factor to Boko Haram insurgency in North Eastern Nigeria.

Research Methodology

The paper uses mainly secondary data sourced mainly from textbooks, conference papers, journal articles, reports of round table discussions, risk assessment projects, inaugural meetings of the Lake Chad Basin Governor’s forum and internet sourced materials. The tools employed to analyze and present the data include descriptive statistics, tabulations and cartographic techniques. This tools of analyses were used by Kazaure (2016) in a study on the north west geo-political zone of Nigeria.

The study area

The study area is north eastern part of Nigeria that comprises the three States of Adamawa, Borno and Yobe. These States were the once mainly affected by the Boko Haram insurgency to the extent that the then President Goodluck Jonathan declared state of emergency on the States on 14th May, 2014.

The three states are located from longitudes 10° – 14° East of Greenwich and from latitudes 7°55" to 13°40" north of the equator. The States covers an aerial landmass of 140,272km². The three States borders Niger Republic to the north, Chad to the North East, Cameroun to the east, Taraba State to the south, Bauchi and Gombe States to the west and Jigawa State to the north west. Base on the 2006 National Population Census the States have a total population of 9,671,393 people. There are many ethnic groups in the study area but the major ones are Kanuri, Hausa, Fulani, Fulbe, Shua Arab, Marghi, Kare Kare, Batta, Bachama, Mumuye and Lunguda. The main urban centres are the states capitals which include Maiduguri (Borno State), Damaturu (Yobe state) and Yola (Adamawa state).

Maiduguri for example is a major commercial center that is strategically located serving effectively as a entreport for the neighbouring republics of Niger, Chad and Cameroun (Oguntoyinbo, 1982). The major occupations of the people include farming of food and cash crops, cattle rearing mainly by the Fulani, and trading activities both domestic and with the neighbouring countries. Despite these economic activities it is observed that most of the region is marked by low socio-economic development indicators, low levels of education, high levels of poverty, low levels of national integration, historical government neglect and perceived and actual marginalization (Nagarajan, 2018).

In terms of physical setting, the climate is characterized by distinct wet and dry season periods lasting from June to September and November to April respectively. Mean annual rainfall ranges between as low as 250mm in the extreme north of Borno and Yobe States to as high as 1000mm and above in the southern parts of Adamawa state (Dingba and Adamu, 2007). During the dry season, the cool, dry dust laden "hamattan" blows from the sahara in the north, bringing low humidity and cool nights (Danu et al., 2010). The vegetation zones include the Sahel savanna in the north to Sudan savanna at the middle and guinea in the southern parts. The Sambisa forest is found south of Maiduguri is an area of Sudan Savanna vegetation. The forest has for some year serve as the base and hideout of the Boko Haram insurgents.

The topography of the area consist of the plains of Borno covering large parts of Borno and Yobe States, except the volcanic Biu Plateau in the south of Borno State. Adamawa State is mountainous land crossed by rivers Benue, Gongola and Yedseram. The highlands include Mandara, Atlantika and Shebsi mountains. The drainage consist of tributaries and distributions of inland rivers such a rivers Komadugu-Gana, Yobe, Ngadda, Yedseran and Goma that all drained into the Lake Chad. In Adamawa state the land is drained by rivers Benue, Mayo Belwa and Gongola on which the Kiri dam is built. The figure below shows the study area.

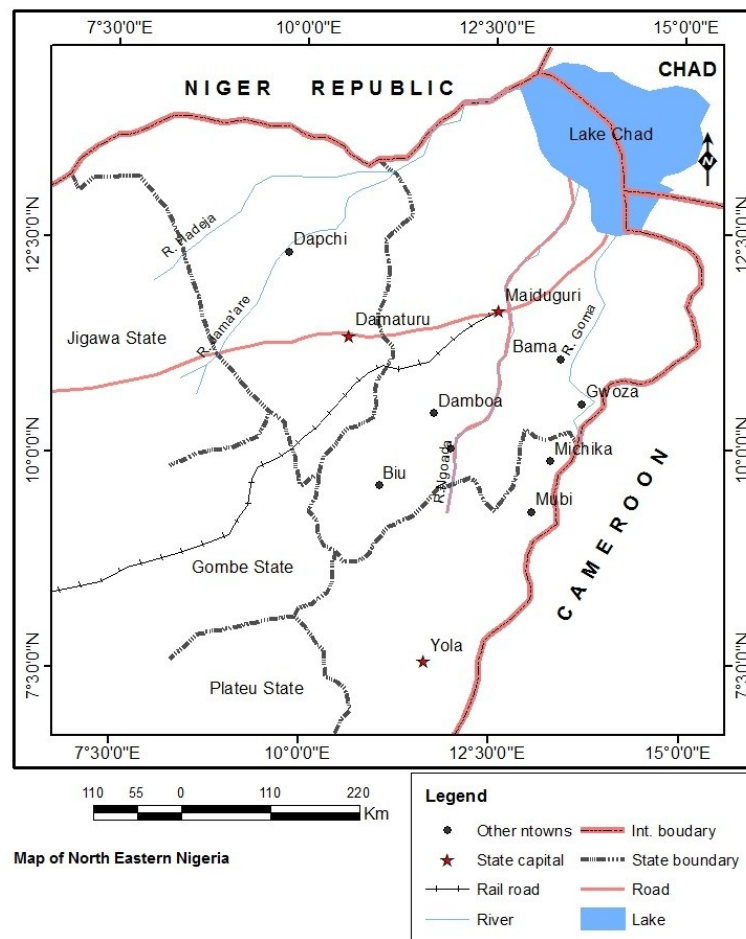


Figure. 1: Map of the study area, northern Nigeria

The Lake Chad as a source of livelihood

The Lake Chad is the largest fresh water reservoir in the Sahel region of Africa. The Lake has been a cultural and trading center for many centuries and provides a vital transit place for trans-African merchants (Musa *et al.*, 2008). The resources of the lake and its basin provided

subsistence for the livelihood of more than 20 million people, most of whom are farmers, fishermen and livestock breeders (Musa et al., 2008). The lake serves as source of livelihoods through the following ways:

- (i) Source of domestic water supply – The Lake Chad has for centuries been used as source of water supply for domestic purposes such as drinking, bathing, washing clothes, preparing food and cooking. The water is also used by the people to carry out various forms of basic sanitation activities that are required by humans for a healthy living. The use of the lake water for domestic purposes is base on the fact that the water is fresh water that has very little salt content which makes it suitable for the purpose. Most rural communities around the lake directly collect the raw water in kegs to be sold for domestic uses in the area. A study by Ladan (2016) on an earth dams in northern Katsina State has showed that motor vehicles and wheel barrows were used to collect the raw water for use at home or for sale in villages up to Niger Republic.
- (ii) Source of fishing – The Lake Chad is a source of fishing activities for many people who are fishermen and depend on fishing as source of their livelihoods. According to Musa *et al.*, (2008) the lake possess 120 fish species most of which are caught and sold to the local people around the lake. The lake fishery is an important source of protein for the local population who consume fishes from the lake. The fishermen have even organized themselves into an association called Lake Chad Fishermen Association to regulate the catch of some species that might be extinct. According to UNEP (2018) the 1960s, the lake has about 135 species of fish and fishermen captured 20,000 metric tonnes of fish every year providing an important source of food security and income to the people. During this period, it is estimated that there were about 20,000 commercial fish sellers in Chad alone (UNEP 2018). The figure below shows jerry cans used to collect water and fishing canoes at the bank of the lake.



Fig. 2: The shores of Lake Chad with cans to fetch water and fishermen canoes used for fishing.

- (iii) Provision of water for irrigation – The Lake provide water for irrigation purposes to produce various food and cash crops. The lake’s water is used for irrigation activities on the dried portion of its banks which is characterized by very rich marine sediment soil referred to as “*firgi*” in the Kanuri language to produce crops such as millet, guinea-corn, maize, beans, wheat, rice, pepper and even water melon, vegetables and calabash among many others (Abubakar, 2017). Therefore over the years, the lake area has become the “food basket” for many communities around the Sahel region of Africa and continue to provide food security for millions of Africans living in west, central, and even some parts of north Africa (Abubakar, 2017). As the present of the lake recharges underground water, some farmers dig wells to tap underground water for farming. The Lake Chad Basin Irrigation Project with its headquarters at Maiduguri assists farmers with farm inputs to increase production.
- (iv) Provision of water for livestock – The Lake Chad provides water for the watering of livestock and pasture grasses grow around the lake. The adjacent lands to the lake serve as an

important grazing area for livestock. The flood plains of the southern lake shores are covered with wetland grasses which serve as pasture for nomadic herders. Thus the lake provides water and grazing lands for pastoralists and lake serve as the traditional convergence point for the pastoralists. These include Tuareg, Toubou, Feda, Kanembu, Shuwa Arab, Fulani and Wadai from Chad (James, 1989 in Onouha, 2008). The lake is the only source of livelihood for the pastoralists in the dry Sahel region. As a result several breeds of cattle were found grazing at the lake where there are available pasture and water. One of the cattle breeds is the *Kuri* that is found in the lake's basin.

- (v) Strategic area for global biodiversity – The lake serve as a critical area for global biodiversity, being home or supportive of 120 fish species and 372 birds species (Musa *et al.*, 2008). The lake is the home to a wide variety of wildlife including elephants, hippopotamus, crocodile and large communities of migrating birds including watering ducks, ruff and other water fowls and lakeshores birds. The swamps of the lake also provide habitats for distinct wildlife species such as the Situnga swamp that is adopted to Antelopes (Musa *et al.*, 2008). Carnivorous wild animals such as the Central African cheetah and the stripped hyena and the caracal use to live around the lake. The birds and wildlife in the area are important as source of food for the local population of the area and some of the local people earn their livelihood by hunting.

The recession of the Lake Chad

The Lake Chad was at one time one of the largest inland water bodies in the world and in 1963, the lake covers a surface area of about 25,000 square kilometers (Coe 2001 in Dami *et al.*, 2011). The surface area of the lake stretched into four countries of Chad, Nigeria, Niger and Cameroun. According to FAO (2018) among the total area occupied by the lake, there is the conventional basin whose area is 427,500km² that 42 per cent in Chad, 28 percent in Niger, 21 percent in Nigeria and 9 percent in Cameroun. This area is under the mandate of the Lake Chad Basin Commission (LCBC) created in 1984 by the four member States with the objective of ensuring the most rational use of the water, land and other resources and to coordinate regional development (FAO,2018).

The recession of the Lake Chad is noted by the United Nations to be the worst case of its kind on the earth and FAO also reiterated the same when it declared that “of all the major basins of the world, probably lake Chad has been affected most by climate change” (Adamu Barau, 2008).

The surface area of the lake has reduced from 26,000 square kilometers in 1963 to less than 1,500 square kilometers in 2018 (UNEP, 2018). The reduction in the size of the lake can be seen when the two pictures are snapped in 1973 and 2017 are compared as shown on the figure below.

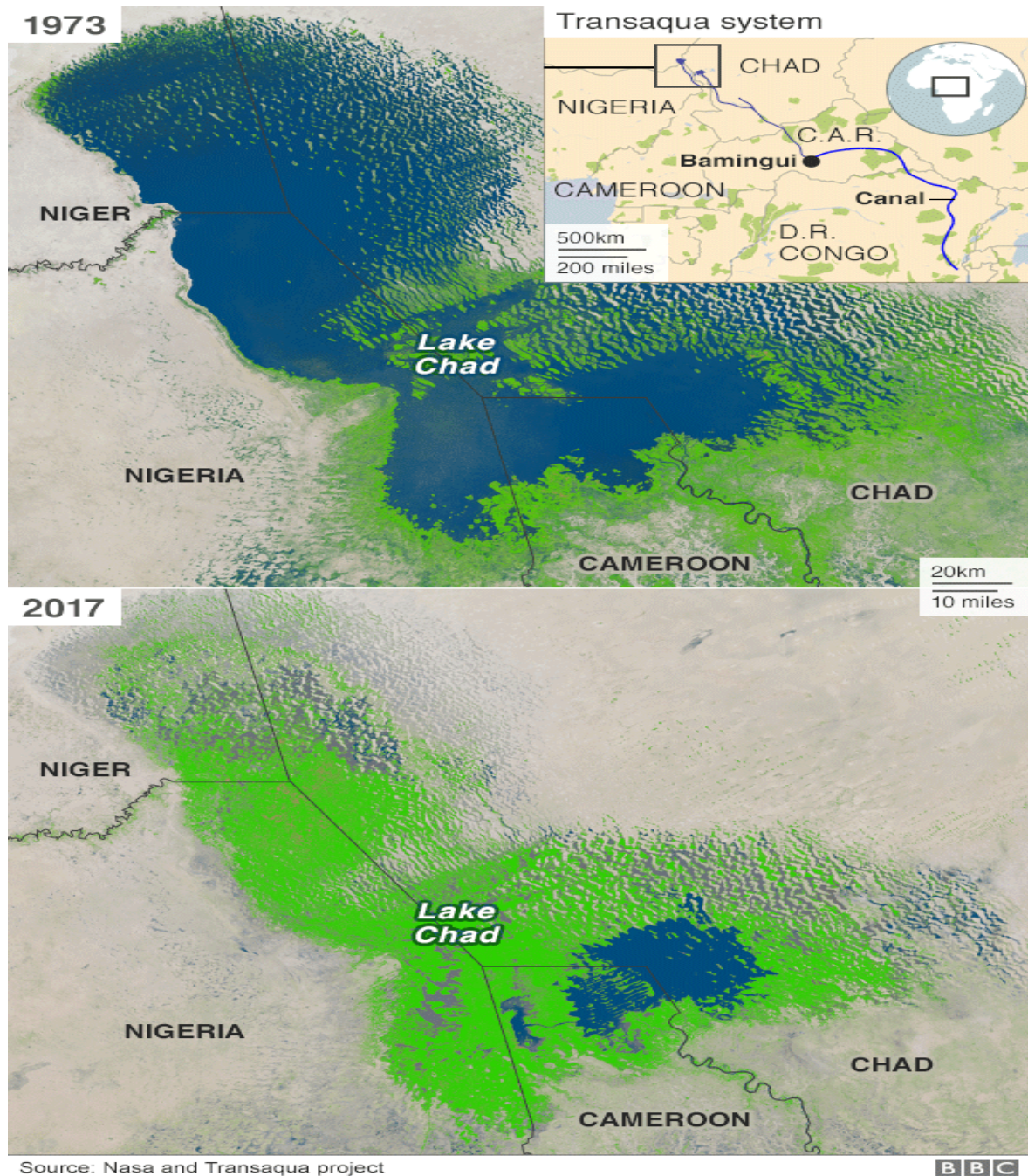


Fig. 3: Map of Lake Chad showing its recession stages sources

The recession of the lake has been attributed to a number of factors based on studies by scholars, governmental and non-governmental organizations. According to UNEP (2018), the lake's size

was decreased by 90% over the last 60 years as a result of extended drought, human activities and the impacts of climate change.

Prolonged drought – There was prolonged drought since the 1960s and continued high temperature in the lake's area. The severe meteorological drought resulted in reduced rainfall for over a decade. This reduced rainfall means less water coming into the lake from rivers and streams that swells the lake during rainy seasons. A report by Musa *et al.*, (2008) showed that the climate condition of most parts of the lake is hot and dry with rainfall varying from 1,500mm per year in the southern parts of the region to less than 100mm in the northern parts of Chad. Due to this situation, there is a shift of isoyet up to 150 – 200 km –southwards and a drop in annual rainfall of 200 – 1000mm in most cities and villages of the basin in the last several decades (Musa *et al.*, 2008). These resulted that the surface area of the lake reduced by more than 20% during Wesr African's disastrous Sahelian drought from 1968-1973 (Glantz, 2004, in Adamu and Barau, 2008). The repeated droughts of the 1970s an 1980s have also led to drastic changes in the environmental conditions of the Lake Chad basin which in turn led to the drying of the lake.

During the 1983 and 1986 drought, the Lake Chad's water level had fallen below 239m and one of the rivers that discharge into the lake, the River Yobe completely dried up and therefore had no water to discharge into the lake (Ayuba, 2005). By the year 2008, virtually all the wetlands in the Lake Chad region are either dried up or on the verge of drying up. The lake itself has shrunk to almost one-twentieth of its size from 1964 to 2008 which further led to serious environmental degradation (Musa *et al.*, 2008).

Human activities – Several human activities have contributed to the recession of the Lake Chad. The water from rivers that flows into the Lake Chad were been diverted in increasing amounts for irrigation purposes by the 1980s and 1990s (Glantz, 2004 in Adamu and Baau, 2008). It is estimated that about one-third of the stream flow is diverted from the Chari river before its flows reaches the Lake Chad. Therefore the Lake Chad basin countries began to sharply intensify their food and fibre (e.g cash corps) production efforts form the 1980s. Not only the Chari river but also its tributary Lagone river is also diverted for irrigation by dam construction for flood rice and pasture production in Chad. The rivers Chari and Lagone provides large percentage of the inflow into the lake Chad while small percentage comes from the Komadugu – Yobe river systems from Nigeria. Large dams are also constructed at the upper stages of these rivers which

include the Tiga and Chalawa Gorge dams built on rivers Chalawa and Kano that are part of River Hadejia that merges with two other rivers from the Komadugu-Yobe river. All rivers such as the Hadejia and Komadugu – Gana that flows through Yobe and Borno States losses water flow as a result of evaporation, evapo-transpiration and infiltration to recharge underground water. This further reduces the amount of water that flows into the Lake Chad (FAO, 2018). The Yedseram, Ngadda and Goma in Borno State are small rivers that do not contribute much water into the Lake Chad. In Niger Republic, there are some streams around the lake but they are seasonal and do not flow into the Lake Chad. These rivers from the three countries that shares the Lake Chad and their condition to water flow into the lake can be seen on the table below.

Table 1: Water bodies that flow into the Lake Chad and their contribution to water flow into the lake.

S/No.	Name of river	Country of origin	Contribution of water flow into the Lake Chad
1	Chari	Chad	Use of river water for rice production and livestock grazing limits water flow into the Lake Chad.
2	Lagone	Chad	Dam construction along its course reduces water flow into the Lake Chad.
3	Komadugu-Yobe	Nigeria	Dam construction limits water flow and loss of water due to climatic factors.
4	Yedseram, Ngadda and Goma	Nigeria	Negligible flow into the lake and part of water halted by swamps
5	Series of streams (Koramas)	Niger republic	Seasonal streams that dry up and their flow does not reach the Lake Chad

Source: FAO (2018)

Impacts of climate change – The impacts of climate change have also led to the recession of the Lake Chad. These impacts have manifested in terms of the prolonged drought in the basin area which is characterized by drastic reduction in the volume of water in the basin (Dami *et al.*, 2010). Also with the prolonged drought, the process of desertification set in resulting in the degradation of the environment of the lake that affected the ecology of the lake negatively. The drought and desertification combined to result to increasing desiccation of the lake as the rate of evaporation increases and evaporation rates exceed rainfall therefore reducing the water contained in the lake. Climate change has further resulted to increase in temperatures which

increase the rate of evaporation of surface water and further lowers down the level of underground water around the lake. Researches conducted for the past 20 years, revealed that about 74% of the seasonal precipitation is lost through evaporation during the same period (Ibrahm, 2018).

Recession of the Lake Chad as a Contributing Factor to Boko Haram Insurgency

Many factors contributed to the rise and continued sustenance of the Boko Haram insurgency which include weak governance, resource scarcity, inequality and injustice, environmental degradation and low investment in human capital development (SGB and UNDP, 2018). However, the recession of the Lake Chad is also considered a contributing factor to the Boko Haram insurgency. The FAO (2018), Pressreader (2018) and Vanguard (2018) have all linked the rise of the insurgency to the recession of the lake. Ross (2018) also support the argument by observing that the minds of the people are focusing on the lake's shrinking which is prompted by the link to the deadly geo-political crisis of Islamic military of the Boko Haram.

The recession of the Lake Chad has contributed to the Boko Haram insurgency in the following ways:

- (i) Loss of sources of livelihoods – As the lake recedes thereby becoming small, many people who are farmers could not get enough water from the lake to practice irrigation farming. There are many others who are fishermen that could not catch enough fish. There are also herders who found it difficult to rear their cattle as droughts over the years have led to loss of pasture and limited water. There is therefore loss of sources of livelihoods through farming, fishing and animal rearing among communities around the lake. According to Ross (2018), in all the villages, people complained there was nothing for young people to do and nothing positive to dream of in the future. This situation had become the perfect recruiting ground to the insurgents. The offer of a little cash and the promise of some training and a gun persuaded many to join. A villager confesses that “I know many young people from my own village who got into these ugly kinds of jobs (Ross, 2018:1). The Boko Haram also invested money, up to one million Naira into the source of livelihoods of some people such as cattle rearing, farming or give motorcycles or sewing machines. These people who benefitted were then asked to join the insurgents or support their activities by providing intelligence to the insurgent and logistics (Ifijeh, 2016). Many community members accept financial grants from the Boko Haram as an essential strategy for keeping their livelihoods

on tract. Furthermore the Boko Haram crisis and the counter insurgency response have negatively affected livelihoods. This negative impact continues to push people to look for alternative forms of income generation, one of which is to join the insurgency (BSG and UNDP, 2018).

- (ii) Endemic poverty – Extreme poverty is a factor that contributed to the Boko Haram insurgency which arises as people lose their sources of livelihoods due to the recession of the lake. The poor people are offered money and lured to join the insurgency to work for them or perform particular tasks. For example in June 2013, a teenager revealed that they were paid 5,000 Nigerian naira (equivalent to 35 US Dollars) and provided with fuel in kegs to set schools ablaze in Maiduguri (Ibrahim and Matau, 2013). A study by Magaji (2017) identified poverty as one of the causes of Boko Harm insurgency. The result of the study showed that among the seven causes of the insurgency, poverty ranked first with 15.2% of the respondents attributing the causes of the insurgency to poverty. Also Mercy Corps and Ford Foundation researched on what led the youths to be recruited into the insurgency found out that one of the reasons is the presence of poverty (Ifijeh, 2016). Amnesty International found out that the Boko Haram insurgents also forcefully recruit young men from poor rural villages in North Eastern Nigeria (Suzdaltsev, 2016). The poverty situation in the region is directly linked to the recession of the Lake Chad that provides source of income to many farmers, fishermen and cattle rearers.
- (iii) Unemployment – The recession of the Lake Chad over the years have rendered many people jobless and thus unemployed with nothing to do on daily basis. The Boko Haram insurgent took advantage of the unemployed people by offering financial support to them to increase its recruits and improve its standing in the communities (Onuoha, 2014). It is because of this that the Boko Haram enjoyed significant support among the rural population in Borno and Yobe States thereby enabling the insurgents to be able to survive nearly ten years of sustained offensive against the military (Husaini, 2018). Even though Ifijeh (2006) has observed that most of the financial support to community members and potential combatants came before or during the year 2009 when the group became violent. Onoha (2014) conducted a study for the United States Institute for Peace which found out that the high incidence of unemployment makes the youths to be engaged in religious based violence. For example an unemployed youth who needed a job to assist his parents, was given a

motorcycle while another unemployed was given money to start bricklaying business and they later worked for the group as informants (Onuoha, 2014).

- (iv) Creation of islands that serve as hideouts – The recession of the Lake Chad has resulted to the creation of several islands which presently serve as hideouts for the insurgents. For some years, the Boko Haram uses the Sambisa forest as their hideout and operating base. But after they were dislodged from the Sambisa forest they resorted to using some of the islands, from where they come to towns and villages to carryout suicide bomb attacks (BSG and UNDP, 2018). These islands serve as their den as it gives them ample view of the surroundings to see any military men coming through the lake to attack them. It is base on this, that the Nigerian Air force Operation thunder strike in September 2018 uses airplanes to conduct air raids to destroy the terrorist camps on the Lake Chad (AIT, 2018).
- (v) Risk of been captured s hostage or combatant to join the insurgency – The recession of the Lake Chad has led to the creation of few areas that are wet which contains water. These few water points became far away from the village settlements which means people have to trek far away to fetch water from the receding lake. This increase the risk of been captured as hostages or for recruitment as combatants, suicide bombers or sex slaves by the Boko Haram. Not only villagers but even herdsmen that come around the few water points are captured and forcefully recruited into the insurgency. For example, a Fulani man was forced to join Mamman Nur’s faction of the insurgents in 2015 after his cows were seized from him by Boko Haram on the fringes of the Lake Chad (Odunsi, 2018). The man was then trained on how to fight wars and engage in combat operations.

Recent Efforts Towards Resuscitating the Lake Chad

A number of efforts have been made by the members of the LCBC, international organizations and Governments towards resuscitating the Lake Chad since the mid-1980s. This paper considers some of the recent efforts which are outlined below:

- (i) In 1982, there was a proposal by an Italian Engineering company to construct a 2,400km canal to transfer water from the upstream tributaries of the mighty Congo River all the way to Chari basin which will in turn feed the Lake Chad (Ross, 2018). In 1985, copies of the plan were sent to the Governments of every African country as well as international agencies but there was no response to the plan (Ross, 2018).

- (ii) A new plan conceived at the February 2018 Lake Chad conference is to engage two Chinese companies that build the three gorges dam to carryout feasibility studies. These studies are to divert part of Congo river to recharge the Chari river which will then add water flow into the Lake Chad. This inter basin water transfer canal would be flanked by service road and railway line.
- (iii) In November 2015, the LCBC member States have adopted a climate resilient action plan aimed at addressing the challenges facing the lake. The plan outlines commitment to empower local communities to build resilience to climate change while focusing on securing their livelihoods, thus increasing the lakes contribution to regional food security (UNEP, 2018).
- (iv) The LCBC with the support of the Nigerian Government and United Nations Educational Scientific and Cultural Cooperation (UNESCO) held a conference on the lake Chad in Abuja from 26th – 28th February, 2018. The theme of the conference “Saving the Lake Chad to restore its basin ecosystem for sustainable development, security and livelihood.
- (v) At the February 2018 Abuja conference critical issues were discussed such as Lake Chad Water Transfer plans, its prospects, challenges and solution. Furthermore, participants at the conference shared and exchanged knowledge and ideas on the best practices for sustainable management of the lake’s natural resources thus sustaining livelihoods of millions of the region’s inhabitants.
- (vi) On 8th – 9th May 2018, another meeting was held by the LCBC Governors Forum consist of the Governors of the riparian region of Niger, Nigeria, Chad and Cameroun. The meeting was organized by Borno State Government and United Nations Development Programme (UNDP). The meeting discusses new methods towards promoting recovery and sustainable development initiatives including revitalizing livelihoods that were attached to the lake.
- (vii) At the 73rd General Assembly of the United Nations on 25th September 2018, the President of Nigeria Muhammad Buhari urged the international community to assist in combating the root causes of the recession of the lake. The President further called for continuous and robust UN cooperation with the national governments and sub-regional and regional organizations such as LCBC, Economic Community of West African States and the African Union to gather support to resuscitate the Lake Chad and the livelihoods of the people (Buhari, 2018).

- (viii) UNESCO has offered to contribute to the creation of a biosphere reserve that will serve as a governance tool to promote peace between the diverse people of the Lake Chad basin to ensure inclusiveness for supporting sustainable economic activities in the basin.
- (ix) The Italian Government has granted the sum of 1.5 million Euros towards funding of a feasibility study for the best and most viable option for the restoration of the Lake Chad. This gesture is well appreciated and other countries especially those from Europe and North America should give this kind of grant, as the resuscitation of the lake will reduce the rate of migration of Africans to Europe in particular.

Recommendations

The following recommendations are offered towards resuscitating the Lake Chad to restore the sources of livelihoods and halt the recruitment of people into the Boko Haram insurgency.

- (i) Members of the LCBC should demonstrate high political will and commitment to save the Lake Chad from extinction to implement the relevant recommendations in the many reports on how to resuscitate the economic activities around the lake and there should be regional cooperation in tackling the Lake Chad basin challenges.
- (ii) LCBC member States should adopt rigorous application of water efficiency strategies that will be essential to reversing the lake's environmental degradation. The member States should also improve cooperation and update their legal framework to protect the shared water resources.
- (iii) The Inter Basic Water Transfer Plan from the Congo or Ubangi river basins should be vigorously pursued as it will restore the lake, improve base flow and channel storage, arrest underground water recession and falling water table and ground water recharge.
- (iv) The Presidents of Chad, Cameroun and Niger Republic should also be fully involved in speaking at international forums toward creating increase global awareness on the socio-economic and environmental challenges arising from the recession of the Lake Chad, threats to livelihoods and its effects on inducing insecurity such as the Boko Haram.
- (v) LCBC member countries should adopt the Biosphere Reserve offered as contribution from UNESCO and should also establish an Economic Free Zone in the region to serve as hub for trade, thereby creating jobs and alleviating poverty.

Or discussing Conclusion

Many factors contributed to the rise and sustenance of the Boko Haram insurgency in north eastern Nigeria. This paper focused on the recession of the Lake Chad as a contributing factor as it is providing the insurgence with a fertile recruitment ground for combatants, suicide bombers, informants and community support. It is important to understand the recruitment techniques of the insurgents as it will provide the key to defeating the insurgents. Tackling the Boko Haram insurgency requires vision beyond a merely military solution which must include tackling the wide spectrum of the root causes of the crisis affecting the Lake Chad basin (BSG and UNDP, 2018). The recession of the lake must therefore be considered as one of the root causes of the crisis. The level of the recession of the lake is alarming which requires urgent attention by the LCBC members and the international community. It is time to act and move from talking or discussing the issue to real action to recharge the lake with water and restore sources of livelihoods thereby reducing insecurity and possibility of the rise of another insurgency in the future.

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